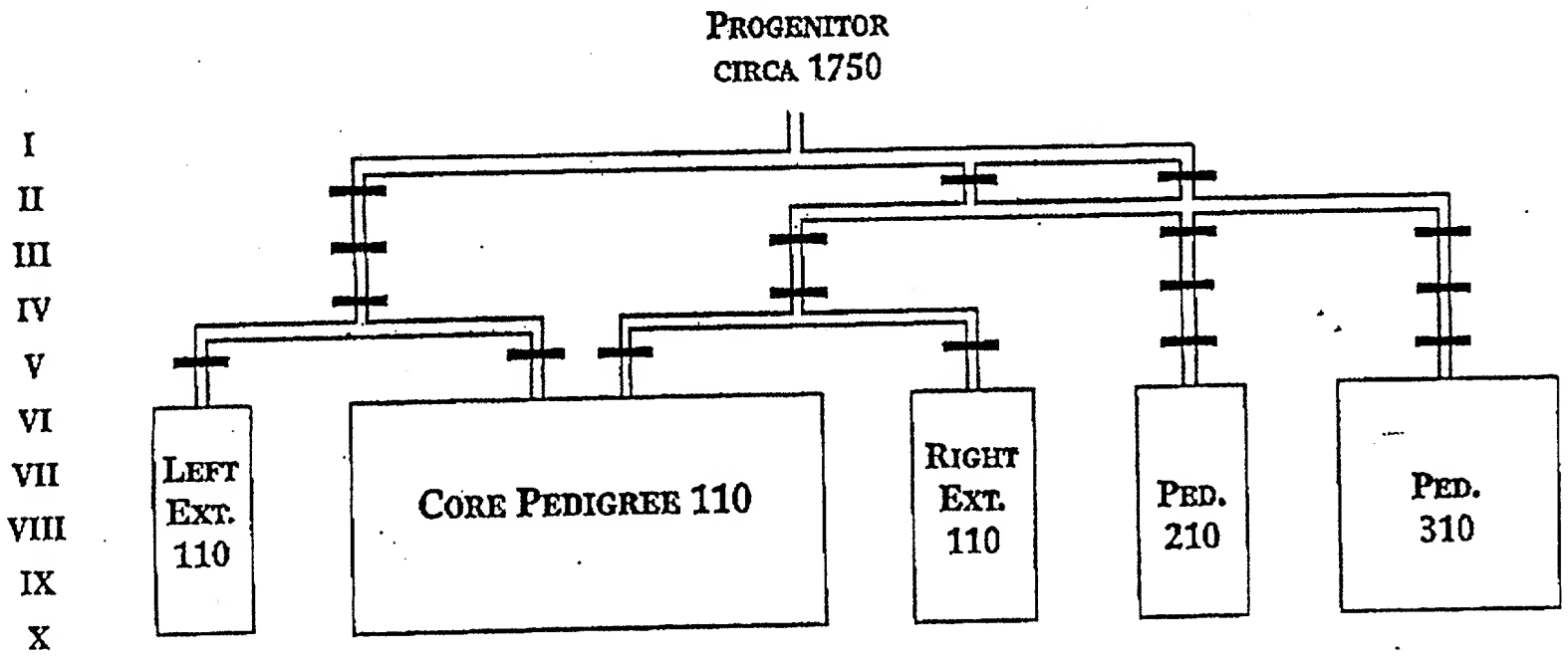
TOETSO" 2TOT8860

FIG. 1

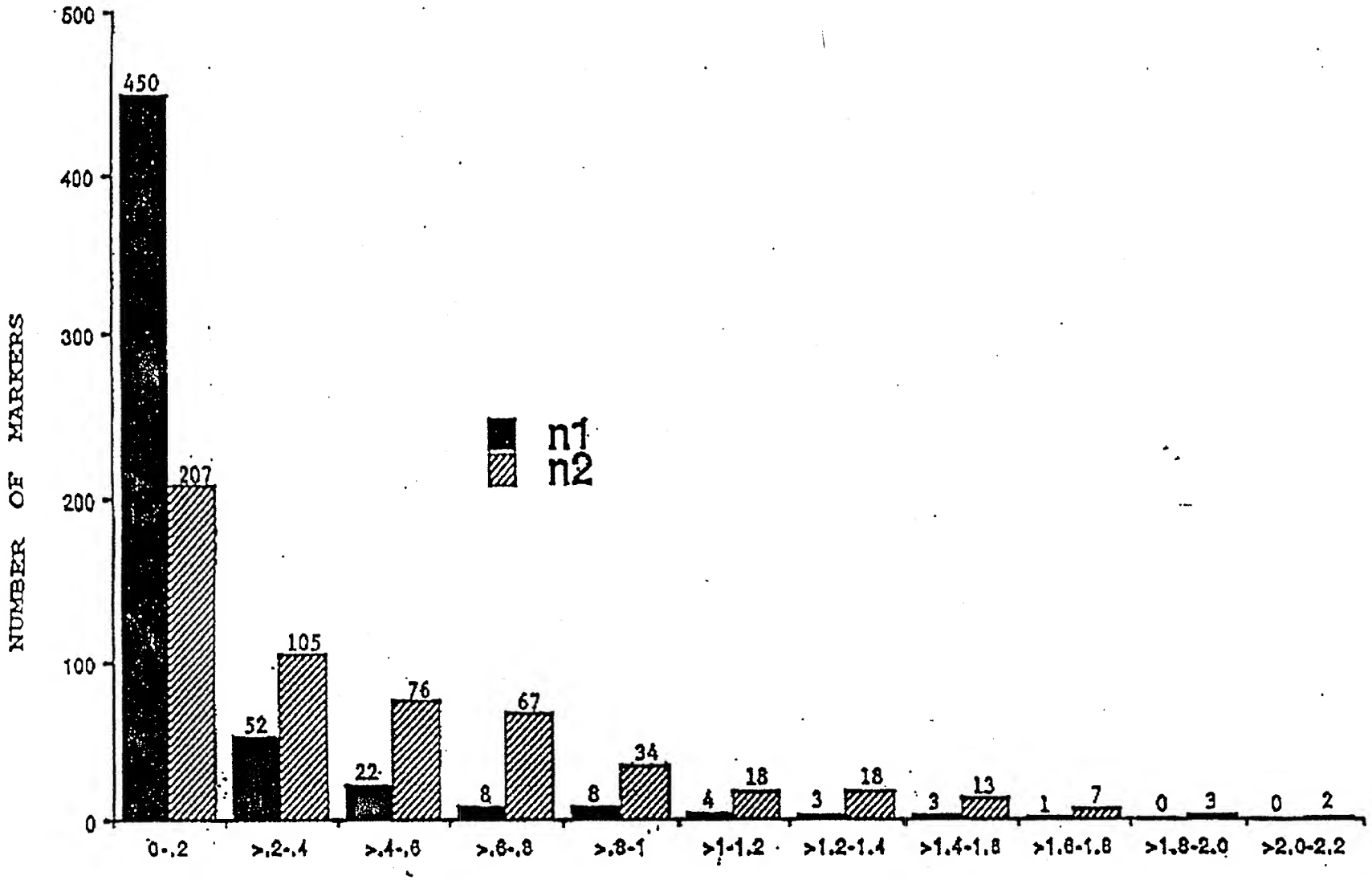
A

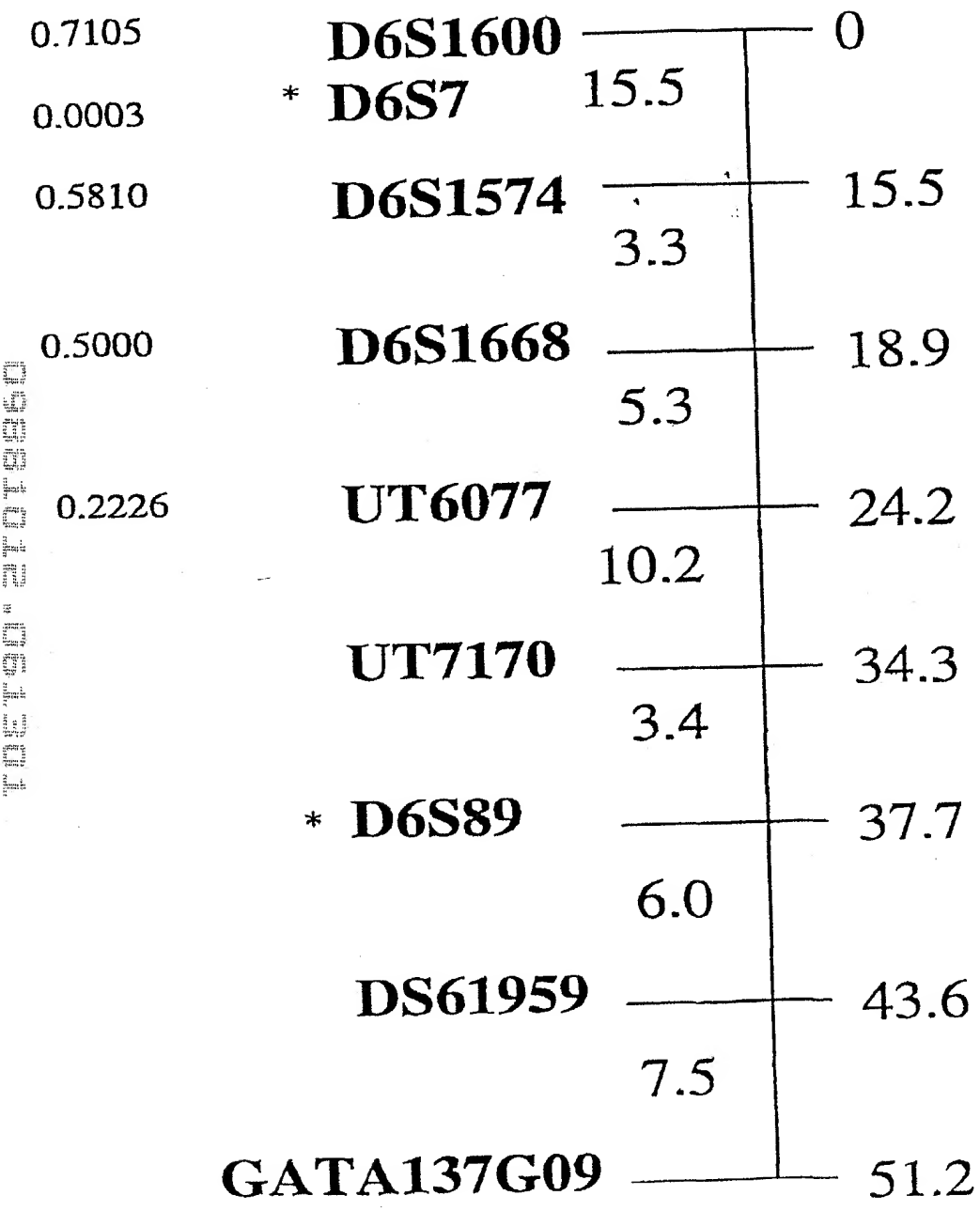
ANCESTRAL TRACE FOR AMISH STUDY BIPOLAR PEDIGREES



T0ST90" 2T0T8960

FIG. 2





* = NG markers/values

Figure 3

SIBPAL P

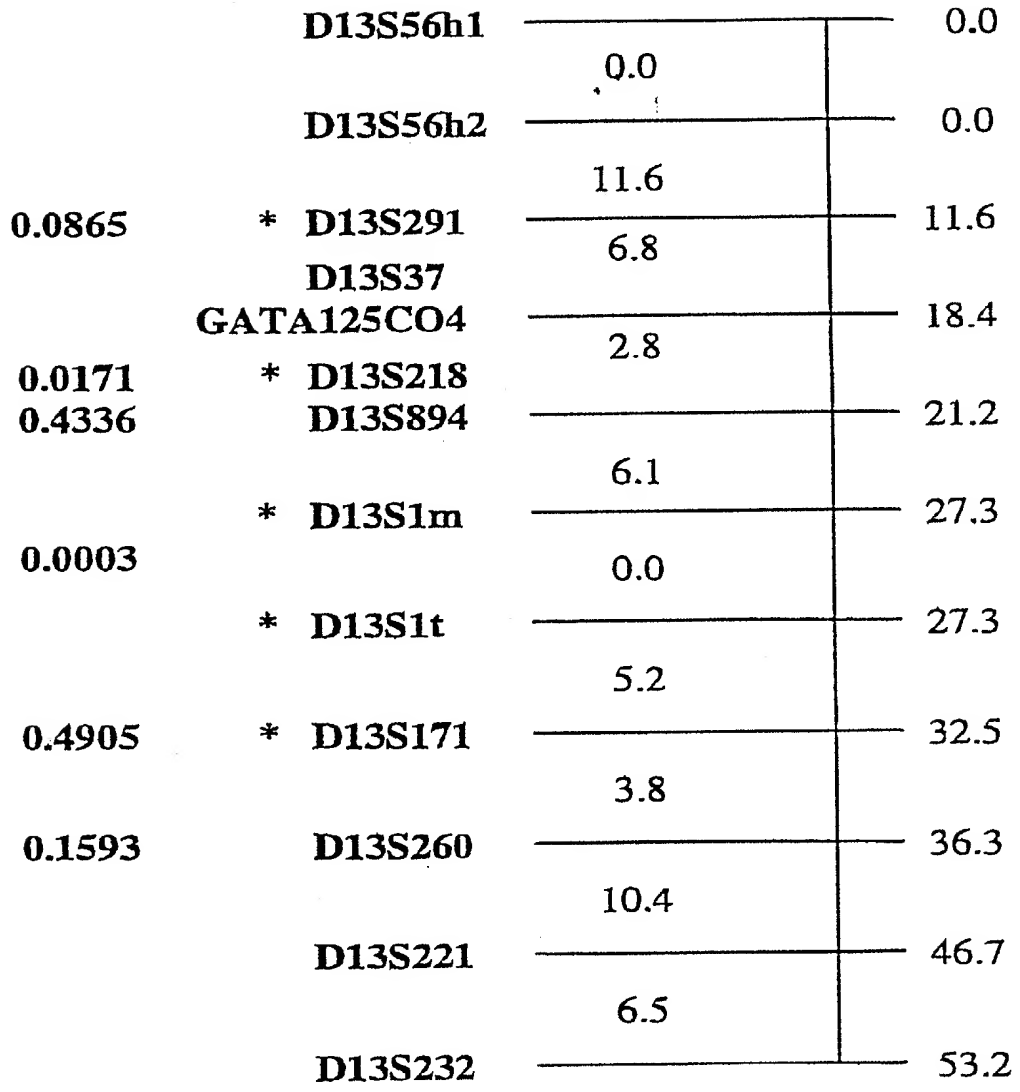


Figure 4

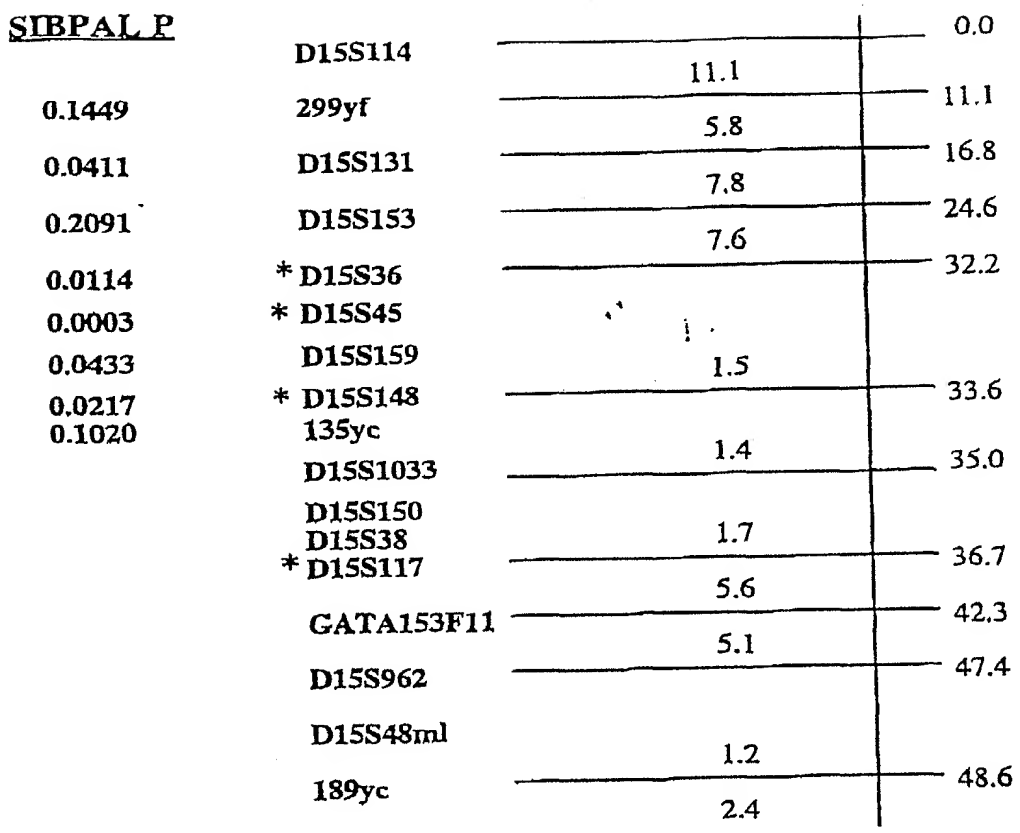

SIBPAL P
0.1449
0.0411
0.2091
0.0114
0.0003
0.0433
0.0217
0.1020
D15S114
299yf
D15S131
D15S153
* D15S36
* D15S45
D15S159
* D15S148
135yc
D15S1033
D15S150
D15S38
* D15S117
GATA153F11
D15S962
D15S48ml
189yc
11.1
5.8
7.8
7.6
1.5
1.4
1.7
5.6
5.1
1.2
2.4
0.0
11.1
16.8
24.6
32.2
33.6
35.0
36.7
42.3
47.4
48.6

Figure 5

SIBPAL P value

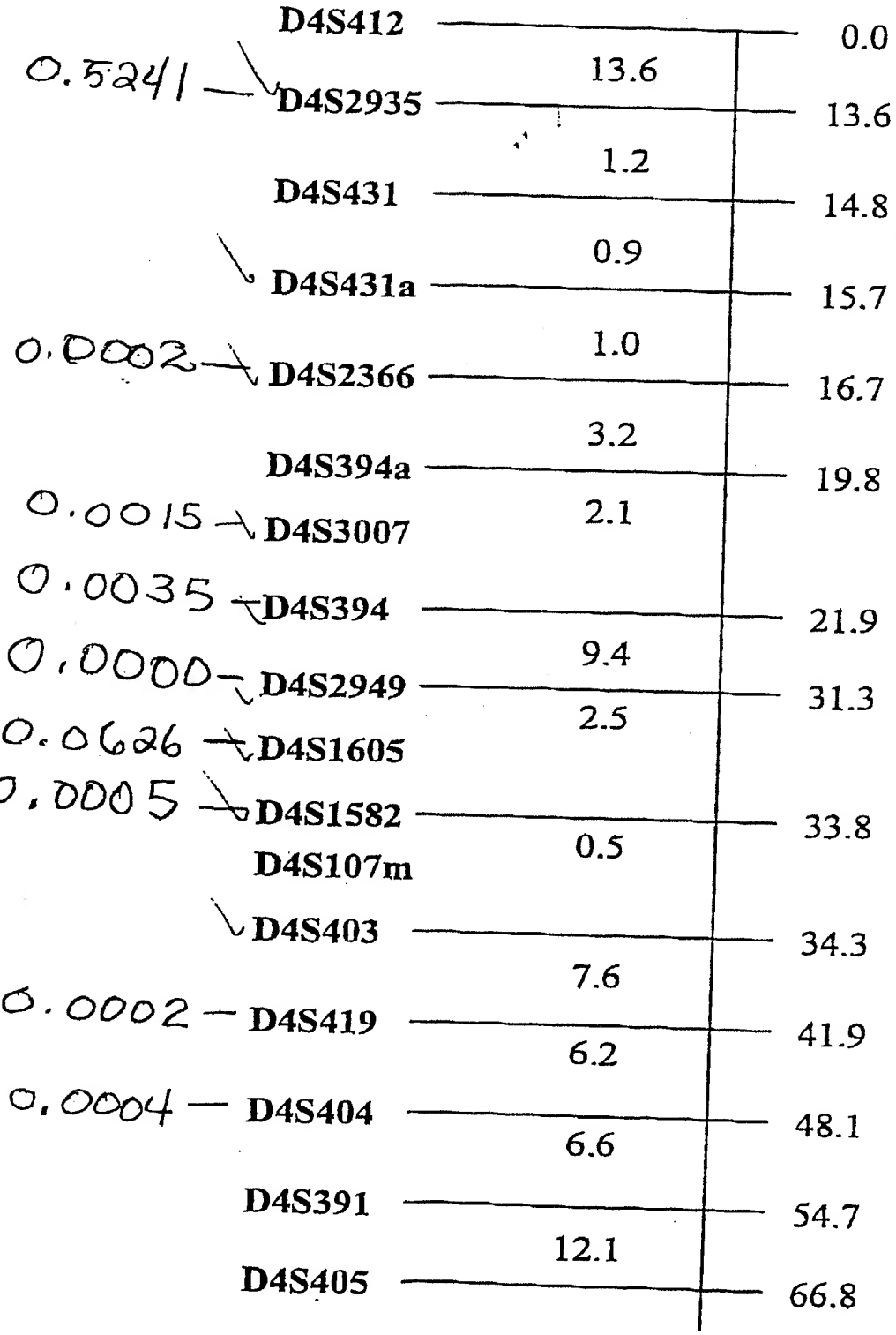


Figure 6

4p Locus

D4S1564-95-3pt

SIBPAL P

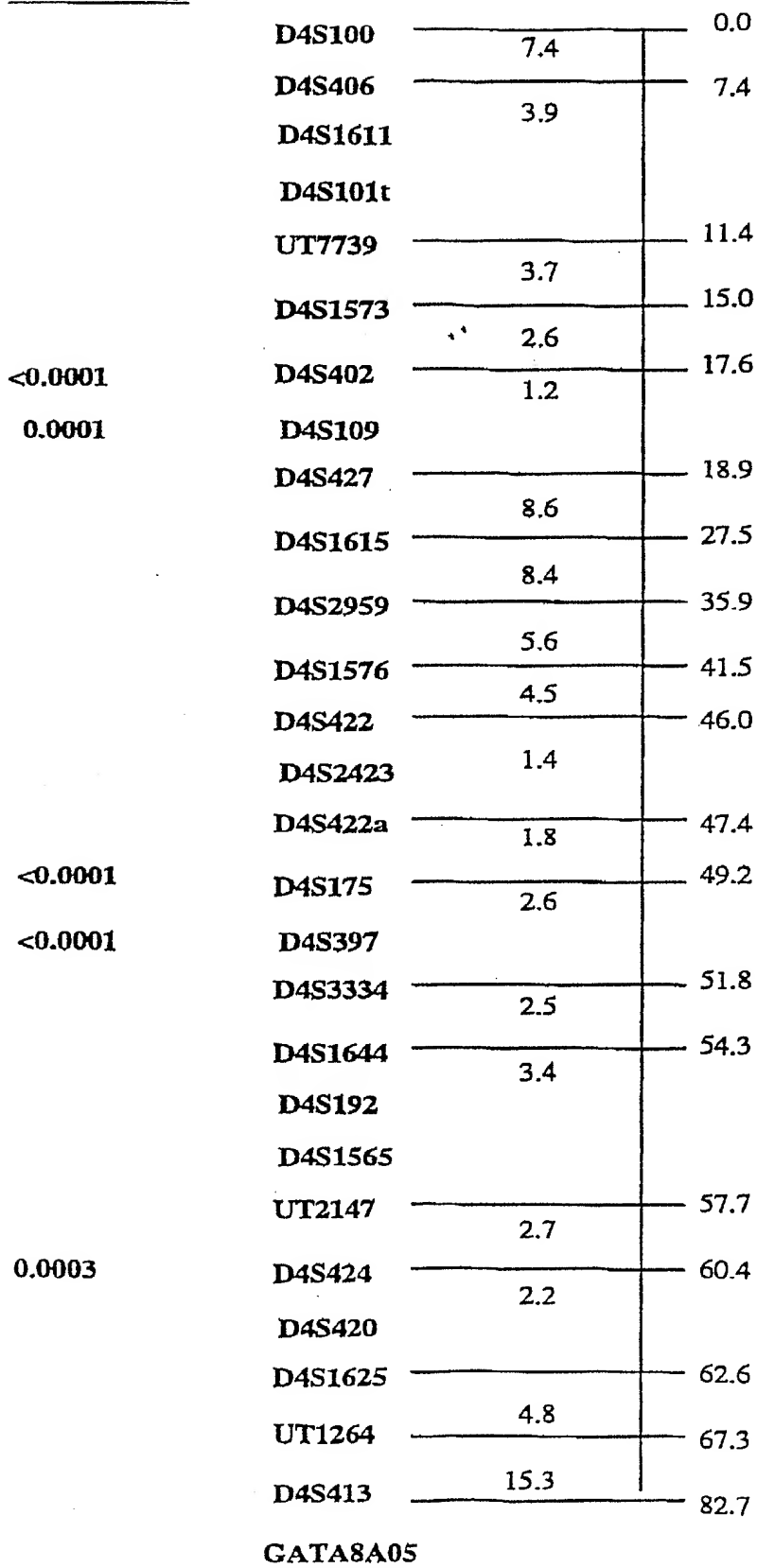


Figure 7

49 Heath (NG 96)

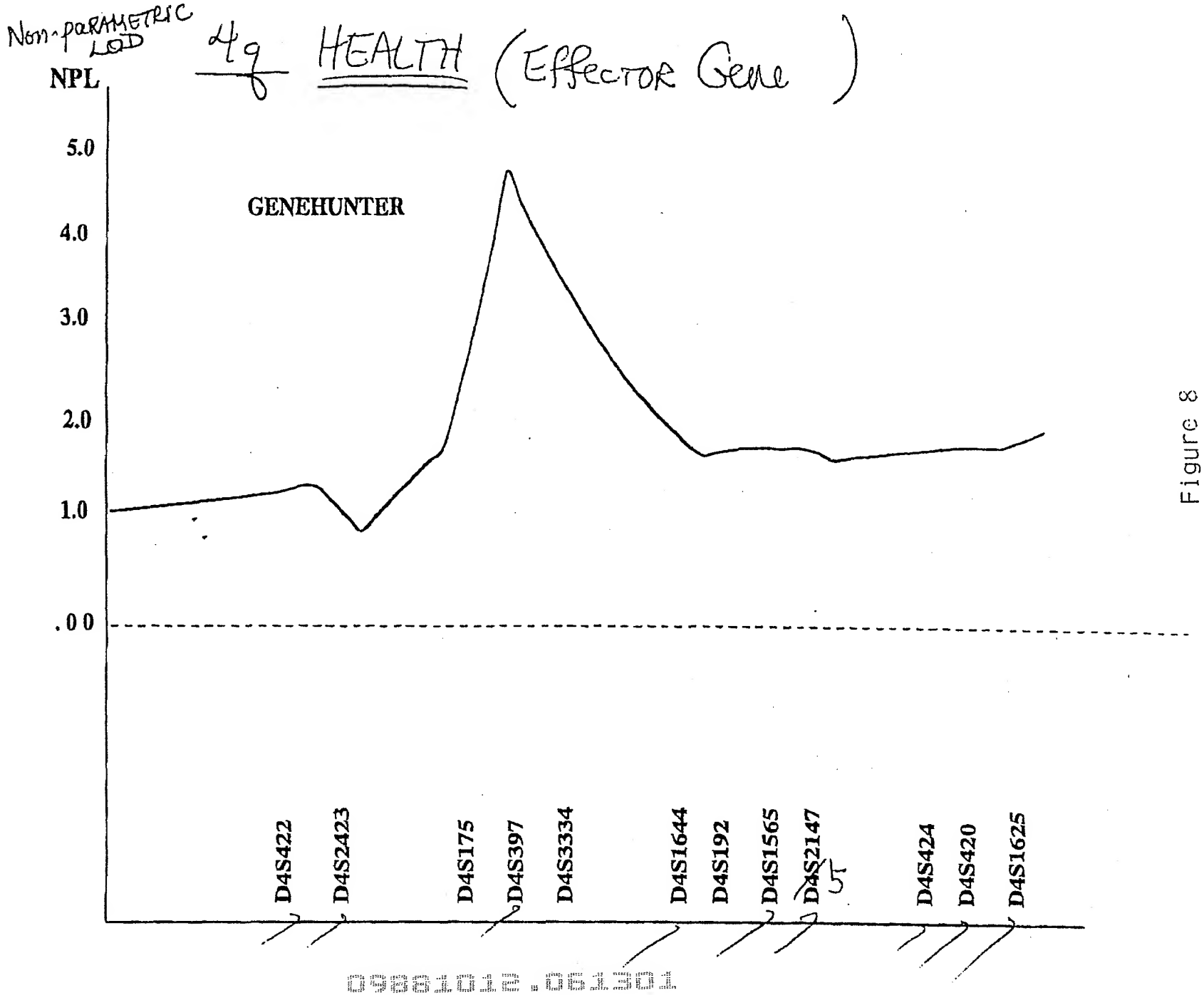

Non-parametric LOD
4q HEALTH (Effector Gene)
NPL
5.0
4.0
3.0
2.0
1.0
.0 0
GENEHUNTER
D4S422
D4S2423
D4S175
D4S397
D4S3334
D4S1644
D4S192
D4S1565
D4S2147
D4S424
D4S420
D4S1625

Figure 8

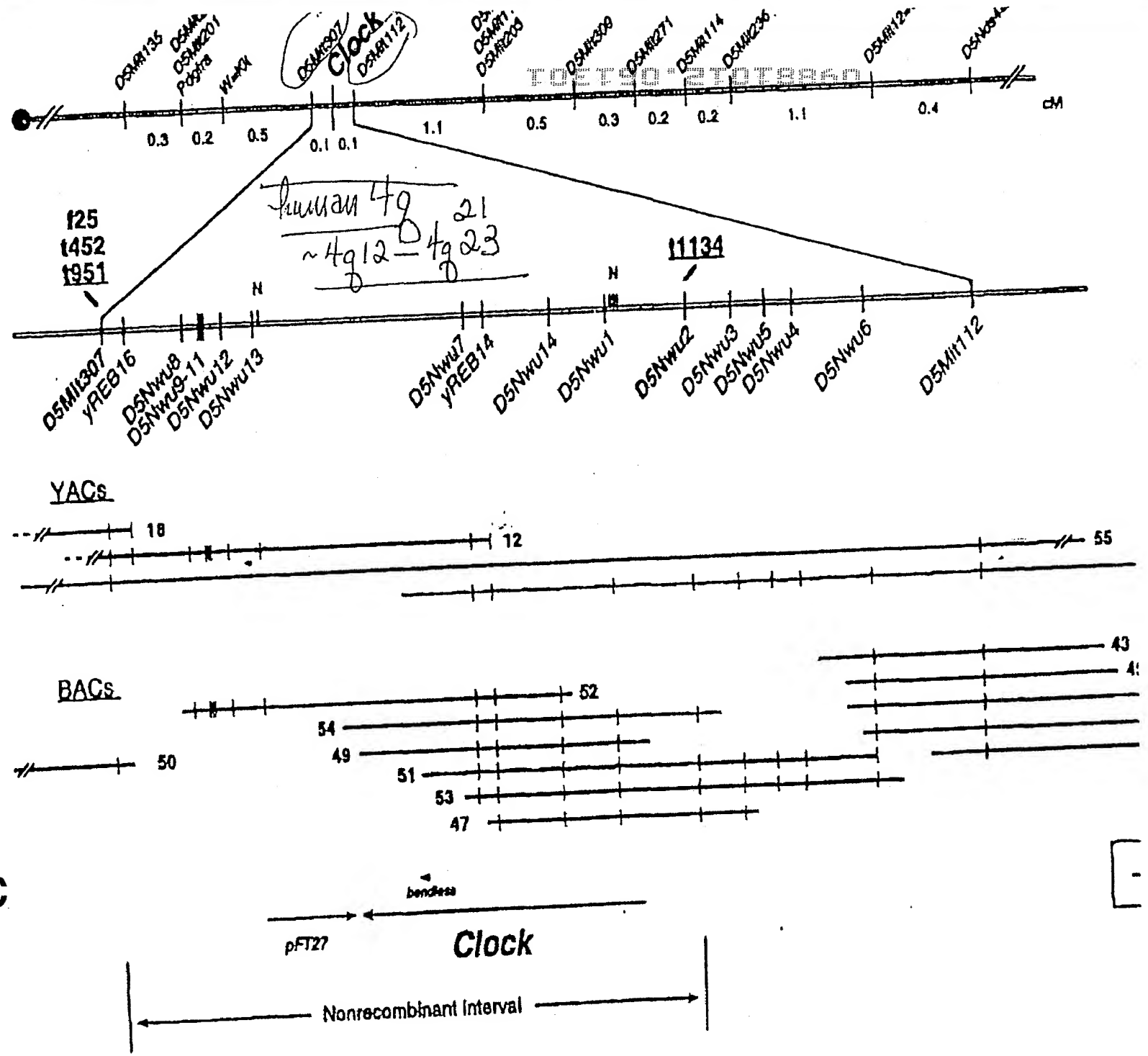


Figure 6

Figure 1. Genetic, Physical, and Transcription Unit Mapping of the *Clock* Locus

T0ET90"2T0T88860

AMISH STUDY BIPOLAR PEDIGREE EXTENSIONS

PROGENITOR

1700-1750

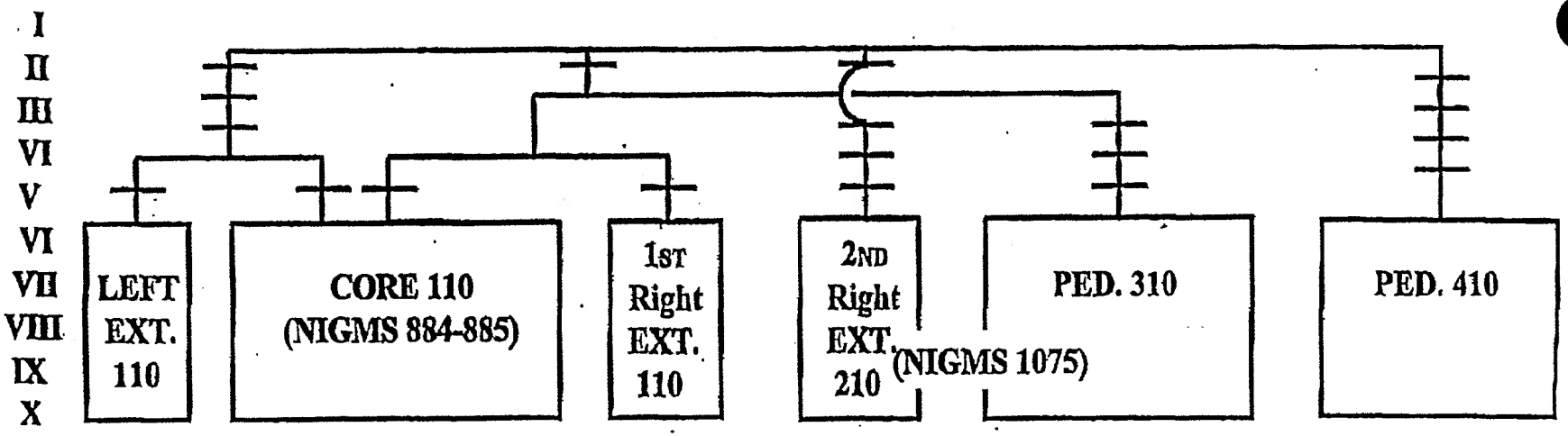


Figure 10

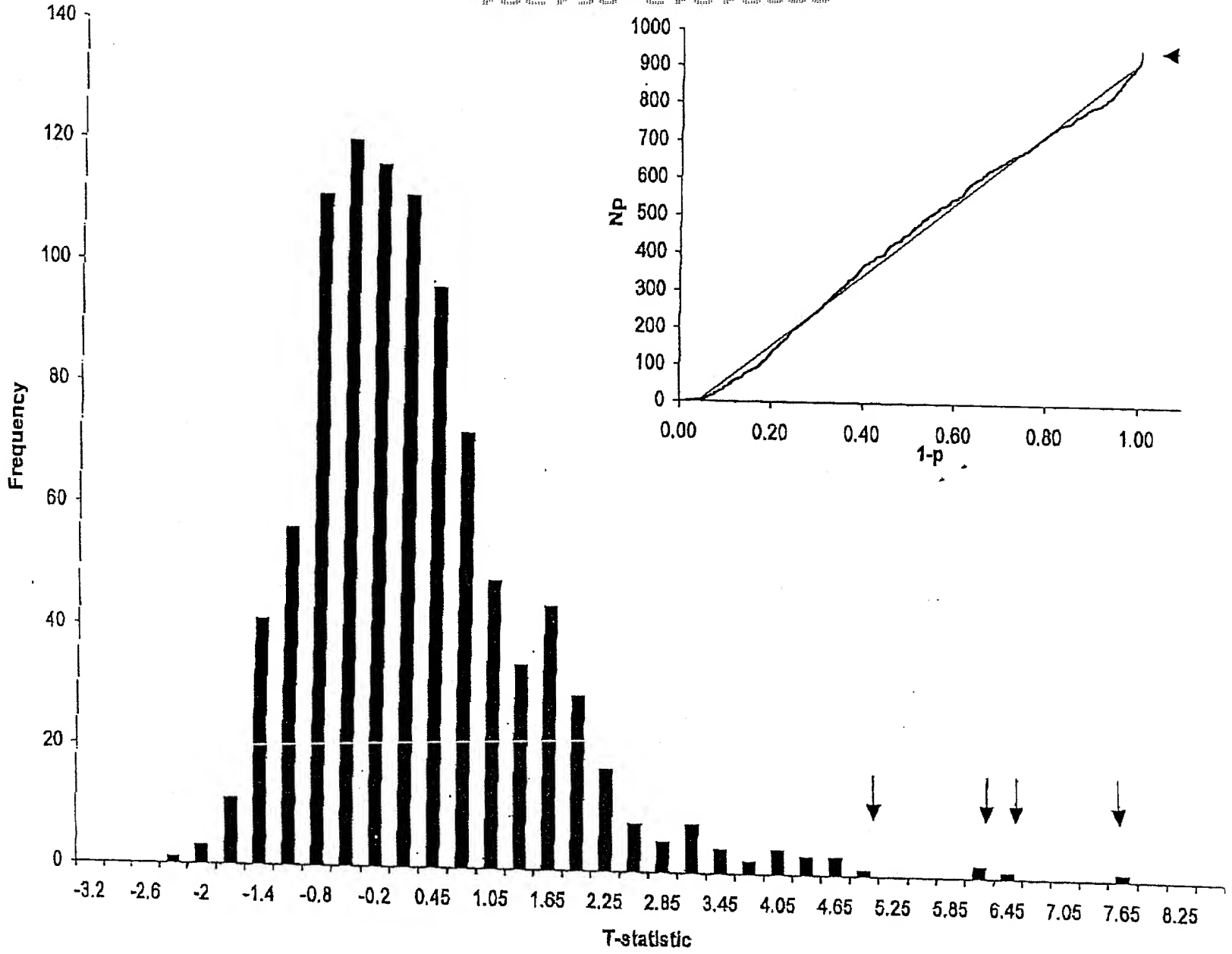

Frequency
140
120
100
80
60
40
20
0
-3.2
-2.6
-2
-1.4
-0.8
-0.2
0.45
1.05
1.65
2.25
2.85
3.45
4.05
4.65
5.25
5.85
6.45
7.05
7.65
8.25
T-statistic
Np
1000
900
800
700
600
500
400
300
200
100
0
0.00
0.20
0.40
0.60
0.80
1.00
1-p

Figure 11

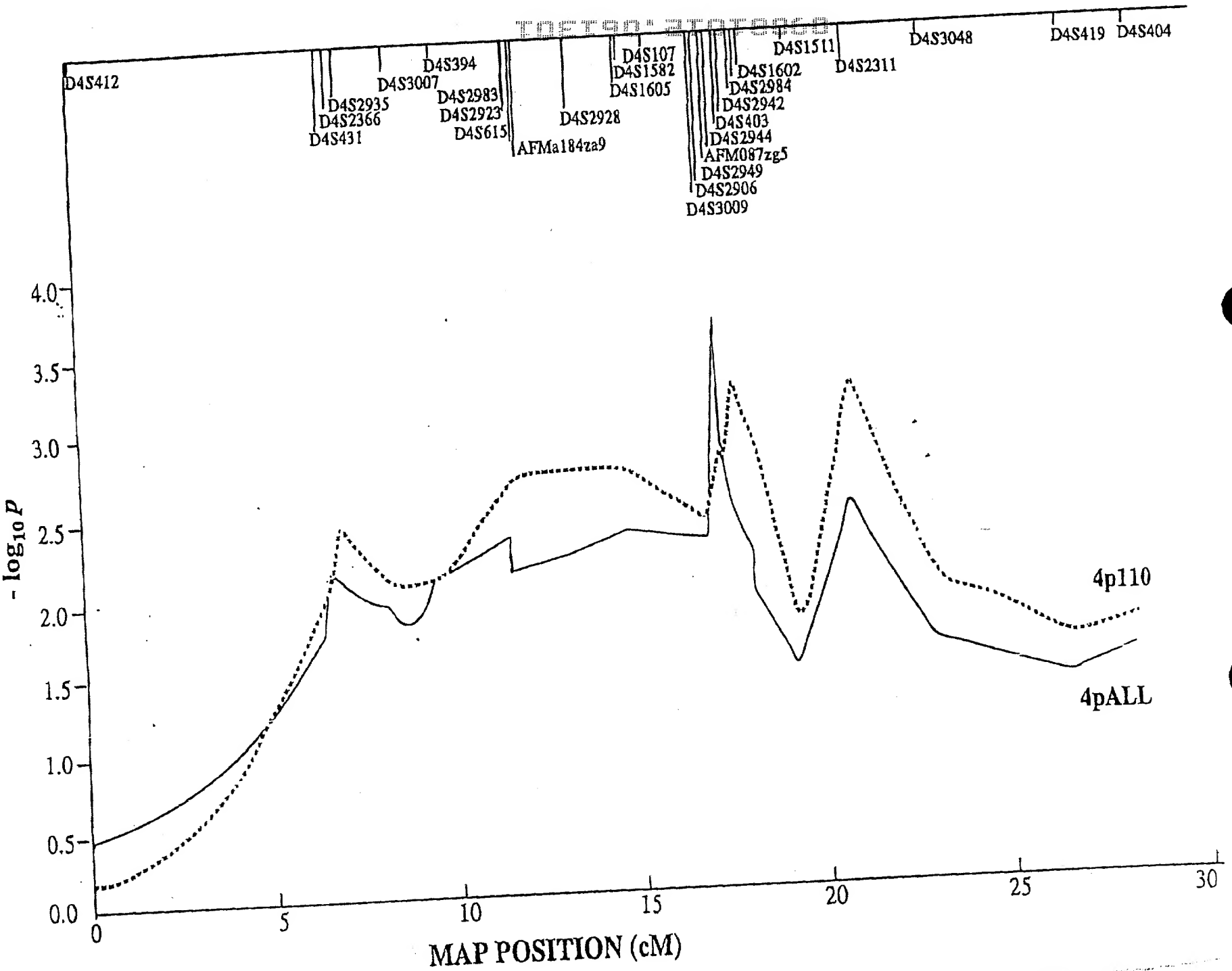

D4S412
D4S431
D4S2935
D4S2366
D4S3007
D4S394
D4S2983
D4S2923
D4S615
AFMa184za9
D4S2928
D4S107
D4S1582
D4S1605
D4S1511
D4S1602
D4S2984
D4S2942
D4S403
D4S2944
AFM087zg5
D4S2949
D4S2906
D4S3009
D4S2311
D4S3048
D4S419
D4S404
4p110
4pALL
- log10 P
MAP POSITION (cM)
0.0
0.5
1.0
1.5
2.0
2.5
3.0
3.5
4.0
0
5
10
15
20
25
30

Figure 12A

T0ET90*3T0T88860

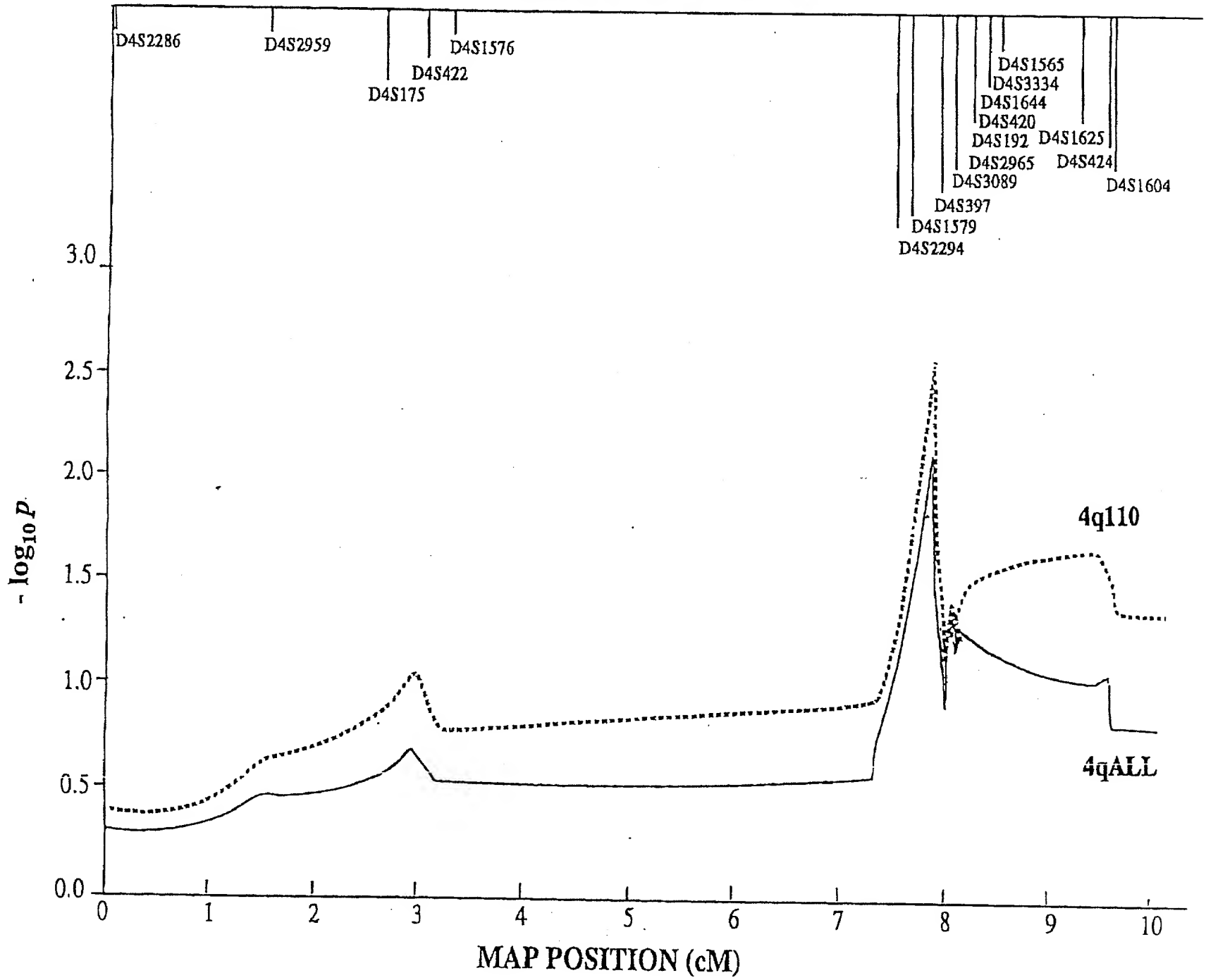


Figure 12B